

A14 Sub 322

nitriding an upper surface of the lower electrode in an NH₃ atmosphere; forming a first amorphous TaON thin film over the lower electrode; annealing the first amorphous TaON thin film in an NH₃ atmosphere; forming a second amorphous TaON thin film; annealing the second amorphous TaON thin film at least once, thereby forming a TaON dielectric film having a multi-layer structure; and forming an upper electrode over the TaON dielectric film.

Please see the attached Appendix for the changes made to effect the above claims.

IN THE ABSTRACT OF THE DISCLOSURE:

Please delete the present Abstract of the Disclosure and replace it with the following new Abstract of the Disclosure which is also provided on a separate page as required.

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Disclosed is a method for fabricating capacitors for semiconductor devices. This method includes the steps of forming a lower electrode on an understructure of a semiconductor substrate, depositing an amorphous TaON thin film over the lower electrode, annealing the deposited amorphous TaON thin film in an NH₃ atmosphere, and repeating the deposition of the amorphous TaON thin film and the annealing of the deposited amorphous TaON thin film at least one time, thereby forming a TaON dielectric film having a multi-layer structure, and forming an upper electrode over the TaON dielectric film. The TaON dielectric film having a multi-layer structure exhibits a dielectric constant that is superior to those of conventional dielectric films. Accordingly, the TaON dielectric film of the invention can be used for capacitors in next generation semiconductor memory devices of grade 256MB and higher.

Please see the attached Appendix for the changes made to effect the above Abstract.